

Operations with Radicals - Add/Subtract

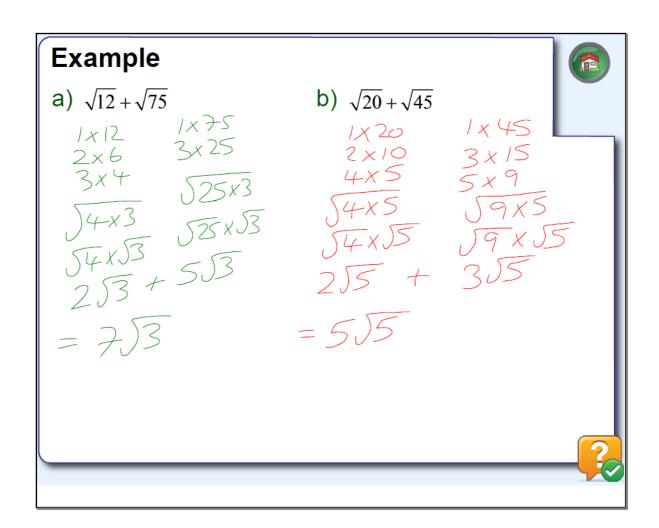
Like Radicals: radicals that have the same number under the radical symbol; $3\sqrt{6}$ and $-2\sqrt{6}$ are like radicals

Adding and Subtracting

- Like with polynomials, when we add like radicals we add the coefficients and keep the radicals the same.

$$-2\sqrt{6} + 4\sqrt{6} = 2\sqrt{6}$$

 If we don't have like radicals we might need to simplify the radical first - otherwise they can't be added or subtracted.

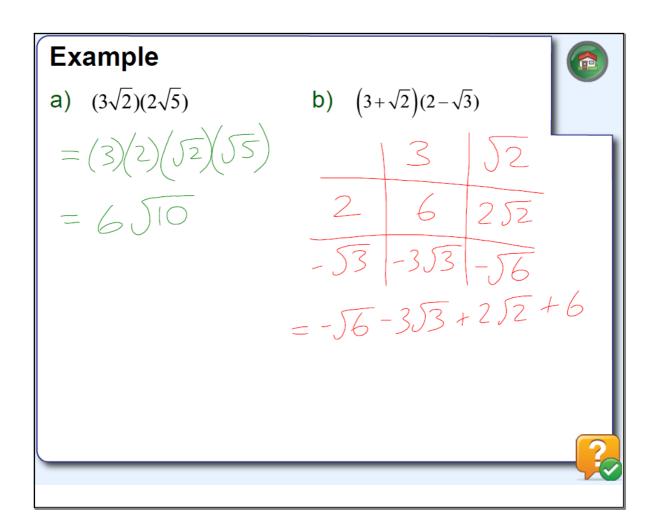


Operations with Radicals - Multiplication

When multiplying we need to multiply the coefficients together and multiply the radicals together:

$$3\sqrt{5} \times -2\sqrt{3} = (3)(-2)\sqrt{(5)(3)} = -6\sqrt{15}$$

We can also multiply radicals like we do binomials, if there are two terms.



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